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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DEUBLE, MARK A

ART UNIT	PAPER NUMBER
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3651

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/758,194	Applicant(s) BEATTY ET AL.	
	Examiner Mark A. Deuble	Art Unit 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "the first conveying element" in line 4. There is insufficient antecedent basis for this limitation in the claim. It is recommended that claim 1 be amended to recite "a first conveying element."

Claim 10 recites the limitation "the main guide roller" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is recommended that claim 1 be amended to recite "the main first main guide element."

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 4-5, 8-9, and 11-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hurd.

Hurd shows a conveyor system with an inlet 20/104 at a first select position facing a first direction, an outlet 24/106 at a second select position above the first facing a second direction,

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and a generally curvilinear and serpentine transportation path disposed between the first and second positions to convey objects from proximate the inlet to proximate the outlet. A first endless conveying element 30/96 having a contact surface defining a portion of the transportation path transports the objects while a tensioner 54 maintains tension in the conveying element. First and second main guide elements that includes a generally arcuate perimetric surface delineating a portion of the transport path is formed by plates 32,74 or same size guide rollers 116, 124 that maintain the registry of objects between the input and the output. The transportation path includes a vertically directed component located at least at the line 3-3 in Fig. 2. A securing element is formed by a second endless conveying element 28/94 with a securing surface that is configured to position and maintain objects on the contact surface of the first endless conveying element along the transportation path. This is done by keeping a substantial portion of the securing surface against the contact surface of the first endless conveying element so that the conveyed objects are positioned between the first and second conveying elements. The first and second conveying elements are preferably formed of a fabricated urethane so that they are elastic and sterilizable belts. A drive means 26 is configured to drive the first and second conveying elements at the same speed. Thus Hurd shows all the structure required by claims 1-2, 4-5, 8-9, and 11-19 and all the steps required by claim 20.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hurd in view of Blattermann et al. (U.S. Patent No. 3,939,965).

Hurd et al. shows generally all the structure required by claim 3 except for a securing element comprising a securing portion of the first conveying element having a securing surface configured to be movable with the contact surface along a substantial portion of the transport path with the transported object being positioned between the securing surface and the contact surface. However, Blattermann et al. teaches that such a securing portion 6 may be provided on an endless conveying belt to prevent articles from sliding relative to the belt by catching the articles between a securing surface 10 and a contact surface defined by recess 7. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the belts of Hurd with a securing portion according to the teaching of Blattermann et al. When this is done, the resulting apparatus would have all the structure required by claim 3.

7. Claims 6-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurd in view of British document number 2 184 415 A.

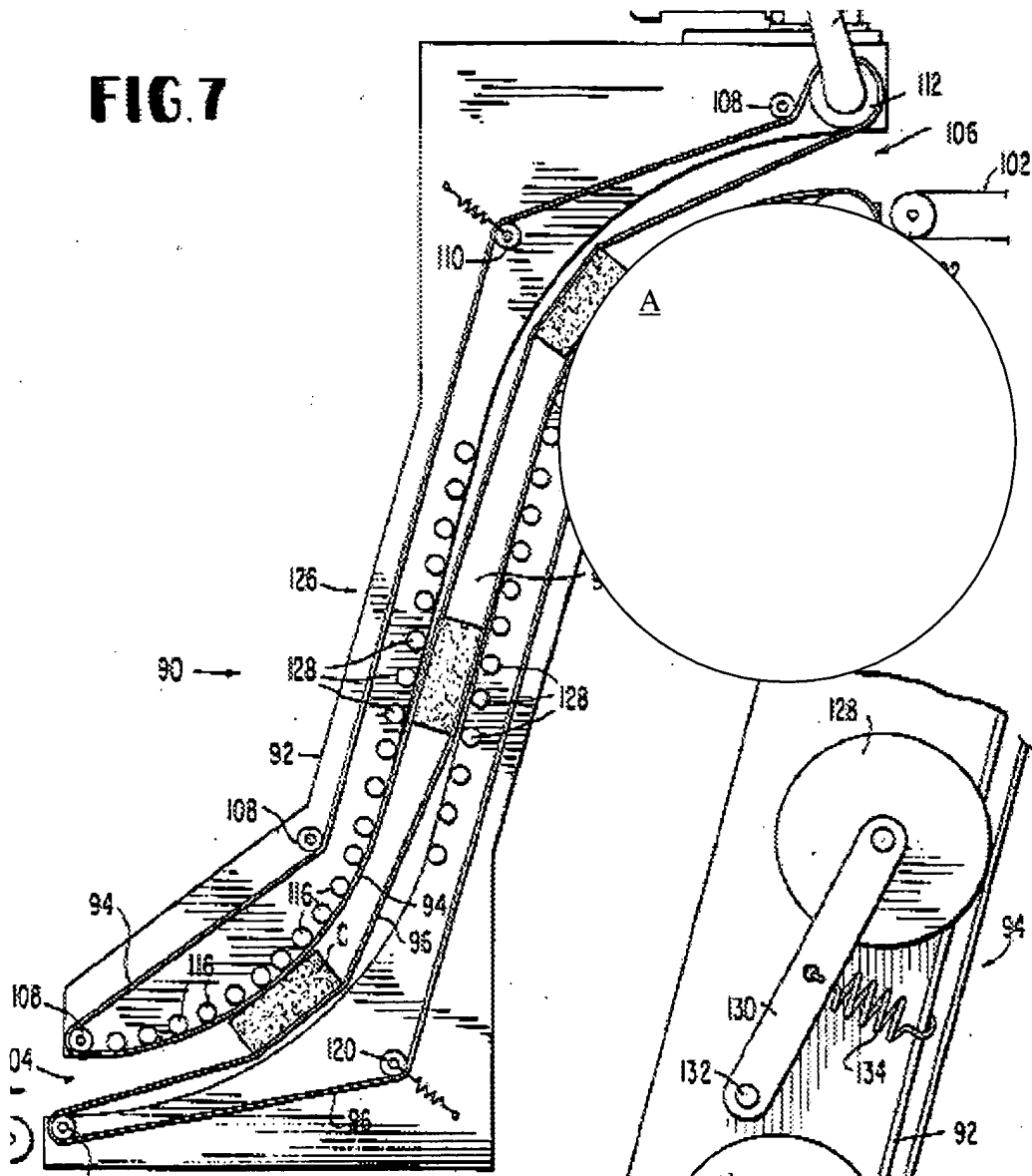
Hurd shows generally all the structure required by the claims except for cylindrical guide elements required by claims 6-7 and 10. Instead of large cylindrical guide elements, Hurd utilizes a plurality of small rollers to form large curves in the transport path. However, The British document teaches that a plurality of small guide rollers 26 may be used interchangeably with one large guide roller 16 as they are art recognized functional equivalents. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to replace the small rollers 116, 124 of Hurd with large cylindrical rollers as taught by the British document. When this is done, the rollers would form first and second main guide elements that

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are separated by a select distance and that are generally cylindrical with substantially equivalent diameters. Furthermore, the vertical distance separating the inlet and outlet would correspond to the sum of the diameters of the first and second guide elements and the distance separating them. Furthermore, because the first conveying element would contact approximately 90° of the circumference of the large guide roller replacing the guide rollers 124 and because the curve defined by these rollers 124 appears to cover approximately $\frac{1}{4}$ of the vertical distance between the inlet and the outlet, the diameter of the main guide roller would cover approximately half the

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vertical distance between the inlet and the outlet (see the roller R added to the figure below).



Furthermore, because the curvature of the large roller would be equivalent to that of the rollers it replaces, the roller would have a low bending force on the object being conveyed to avoid

damaging the object. Thus, when Hurd is modified according to the teaching of the British document, it would have all the structure required by claims 6-7 and 10.

Response to Arguments

8. Applicant's arguments filed May 23, 2005 have been fully considered but they are not persuasive.

Applicant argues that Hurd fails to show "1), a generally curvilinear transportation path; 2) an endless conveying element to transport an object having a contact surface defining a portion of the curvilinear transportation path; 3) a main guide element including a generally arcuate perimetric surface delineating a portion of the curvilinear transportation path; and 4) a securing element that positions at least one object on the contact surface along the curvilinear transportation path." The examiner respectfully disagrees because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

With regard to argument 1, it is not understood how the path transport path of Hurd could be considered anything but curvilinear as it follows a nearly identical path to that shown in Fig. 2 of the present application with two curved sections separated by a linear section. Furthermore, with regard to argument 2, it is not understood how the first conveying element of Hurd does not form an endless conveying element to transport an object having a contact surface defining a portion of the curvilinear transportation path as the conveying element 30 and 96 of Hurd function almost identically to the conveying element 26 of the present application. Finally, the same thing may be said about arguments 3 and 4 because the main guide elements and the

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securing elements of Hurd correspond closely to the elements described in the present application.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (571) 272-6912. The examiner can normally be reached on Monday through Friday except for alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene O. Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md


GENE O. CRAWFORD
PRIMARY EXAMINER